

Amendment under 37 CFR § 1.111  
Application No. 09/703,869  
Attorney Docket No. 001461

### **REMARKS**

Claims 1-6 are pending in the application. Claims 1 and 4 are herein amended.

#### **Claim Rejections - 35 U.S.C. § 103**

Claims 1 and 3-6 were rejected under 35 U.S.C. § 103(a) as being obvious over *Suzuki* (U.S. Patent No. 6,213,652 - assigned to Fuji Xerox) in view of *Schoenzeit* (U.S. Patent No. 5,619,624). Favorable reconsideration is requested.

The technical feature of the present invention described in amended claim 1 is that the processor attaches a print data storing unit storing print data of an accepted print job and a spool file storing unit storing the print data read out from the print data storing unit in accordance with a print request command, and the processing unit provided in the processor starts writing the print data of the print data storing unit to the spool file storing unit in accordance with the print request command, before the processing unit finishes storing the print data in the print data storing unit.

Therefore, the processing unit is able to start storing the print data of the print job in the print data storing unit and also to supply the print data to the device control filter. Thereby, a time from the receipt of a print job to the start of the requested printing can be reduced, and a recovery process for re-printing can be performed at high speed, even when a problem occurs on the printer side.

Amended claim 4 also recites that the spool file storing unit storing the print data read out from the print data storing unit is provided in the processor in addition to the print data storing

unit. In addition, amended claim 4 recites that when the device control filter is not analyzing and processing print data, the processing unit reads out the print data of the print job in accordance with a specific condition which determines an output sequence of the registered print jobs stored in the print data storing unit, and writes the read out print data to the spool file storing unit. Therefore, the processing unit in the present invention selects a most suitable print job from the accepted print jobs in accordance with the specific condition, and prints the print data of the selected print job.

*Suzuki* discloses a print processing device having a job acceptance section 201, a job control section 203 and a job execution section 204, as shown in Fig. 27. The print processing device prevents the job processing from being interrupted for a long time and a printer from being fully occupied for a long time, even when the reception of a succeeding document of a job is interrupted due to a fault of a network or the like, while a print request of plural documents is accepted as a single job to be printed. In particular, *Suzuki* states:

The job acceptance section 201 accepts a job input from a client workstation through a network N and unifies various types of format of received jobs into a job format defined by this print processing device. ... Each job acceptance section 201 has its own spool and holds document data of a printed document included in a received job.

(Col. 41, lines 55-67.) *Suzuki* also states:

When the job execution section 204, which is a printer, fetches document data of a print document from the spool of the acceptance section 201 to print the document, the object processing section 208 also reads document attribute, such as the location of document data and paper size on which the data are printed, from the object file 209 and sends that document attribute to the job execution section 204.

(Col. 42, lines 53-59.)

Applicants respectfully submit that *Suzuki* does not disclose both “a print data storing unit storing print data” and “a spool file storing unit storing said print data read out from said print data storing unit” as recited in amended claims 1 and 4.

In the print processing device of *Suzuki*, the job acceptance section 201 has a spool for storing document data of the accepted print document. When data is received by the print processing device, the data is divided into attribute data 280a and document data 280b. (Col. 44, line 67 to col. 45, line 5.) The document data is stored in the spool of the job acceptance section 201 and the attribute data is stored in the object file 209. The file path name of the spool of the document data is stored in the object file. When the job execution section 204 (the printer) is ready to print, it retrieves the document data directly from the spool of the job acceptance section. (Col. 42, lines 53-56; Fig. 27.)

On the contrary, the processor of the present invention recited in claims 1 and 4 includes a print data storing unit which stores print data of an accepted print job in addition to a spool file storing unit storing the print data read out from the print data storing unit in accordance with a print request command.

In response to the previous arguments, (Response, December 27, 2005, page 7), the Examiner asserted that *Suzuki* teaches a print data storing unit and a spool file storing unit. (Office Action, page 10.) First, the Examiner stated that the spool of the job acceptance section in *Suzuki* is the print data storing unit, and the printer queue in *Suzuki* is the spool file storing

unit. Second, the Examiner stated that a storage unit is inherent: “since the unifying process takes time, the job control section must have (inherent) a storage [unit] for storing the print job to prevent the print job from being lost during the unifying process.” Third, the Examiner stated that the job acceptance section has a print data storing unit because the job acceptance section has its own queue.

Applicants respectfully submit that the printer queue of *Suzuki* is not “a spool file storing unit storing print data” as recited in amended claims 1 and 4, and thus, *Suzuki* does not disclose both “a print data storing unit storing print data” and “a spool file storing unit storing said print data read out from said print data storing unit” as recited in amended claims 1 and 4.

The printer queue 260 of *Suzuki* does not store document data. The printer queue 260 is a waiting list of received print jobs. When a job processing request is received, a job block is placed or stored in the printer queue 260, and document blocks (filename list) corresponding to the job block are also stored in the printer queue 260. (Col. 44, lines 41-46.) Neither job blocks nor document blocks are print data.

Furthermore, *Suzuki* discloses that the job execution section 204 gets document data directly from the spool of the job acceptance section 201 to print the document. *Suzuki* states:

When the job execution section 204, which is a printer, **fetches document data of a print document from the spool of the job acceptance section 201** to print the document, the object processing section 208 also reads document attributes.

(Col. 42, lines 53-56, emphasis added.) This means that the job execution section, which is the printer, does not get document data from the printer queue. This is also demonstrated in Fig. 27

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which shows a line drawn directly from the job acceptance section 201 to the job execution section 204.

The printer queue 260 of *Suzuki* does not store print data, thus the printer queue 260 is not “a spool file storing unit storing print data.”

The Examiner also asserted that the job control section 210 of *Suzuki* inherently has a storage unit. The Examiner stated that *Suzuki* teaches that the job acceptance section 201 unifies various types of formats of the received print jobs and passes the unified format print job to the job control section, and thus, since the unifying process takes time, the job control section must have (inherent) a storage for storing the print job to prevent the print job from being lost during the unifying process. (Office Action, page 10.)

However, the unifying process takes place in the job acceptance section, not in the job control section. The job control section receives the unified format from the job acceptance section. *Suzuki* states:

The job acceptance section 201 accepts a job input from a client workstation through a network N and unifies various types of format of received jobs into a job format defined by this print processing device. The job acceptance section 201 then feeds this unified format to the job control elementary section 210 of the job control section 203.

(Col. 41, lines 55-60, emphasis added.) Since the unifying process takes place in the job acceptance section 201, the job control section 210 does not inherently have a storage for storing the print job for preventing the print job from being lost during the unifying process.

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The Examiner also asserted that the job acceptance section of *Suzuki* has its own queue. The Examiner cited Col. 41, lines 65-67 for disclosing such a feature. This passage merely states that the job acceptance section has its own spool. The Examiner already cited the spool in the job acceptance section as corresponding to the storing unit of the present invention. As we stated above, *Suzuki* discloses that the job acceptance section 201 has a spool for storing document data of the accepted print document. However, *Suzuki* does not disclose a print data storing unit which stores print data of an accepted print job in addition to a spool file storing unit storing the print data read out from the print data storing unit in accordance with a print request command.

*Suzuki* does not disclose both “a print data storing unit storing print data” and “a spool file storing unit storing said print data read out from said print data storing unit” as recited in claims 1 and 4. Therefore, *Suzuki* does not disclose the elements as recited in claims 1 and 4.

For at least the reasons stated above, the processor of the present invention is different from the print processing device of *Suzuki*. Additionally, the technical features of the present invention are not described in *Schoenzeit*. The devices described in *Suzuki* and *Schoenzeit* do not have the advantageous effect as in the present invention.

Accordingly, withdrawal of the rejection of claims 1 and 3-6 based on *Suzuki* in view of *Schoenzeit* is hereby solicited.

An IDS, including copies of the cited references, is filed with this response. The Examiner is requested to consider the references cited in the IDS.

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In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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